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Characterization Summary Report (Woodard & Curran, 2015), PPG Industries, Inc. (PPG) operated a paint manufacturing facility. Metal pigments were brought to the Site for the manufacturing of paints, including basic lead carbonate (also known as white lead). Elevated Lead concentrations (at concentrations greater than the preliminary remedial goal of 800 mg/kg) are frequently observed in soils located on the south side of the Site, with a cluster of soil samples with elevated Lead concentrations surrounding the perimeter of Building #7, including 6,210 mg/kg Lead in RI boring B-30; 8,690 mg/kg Lead in RI boring B-75; and 10,800 mg/kg Lead in historical boring HF-2. Lead in the soil can act asis a source material to groundwater, particularly with the substantial Lead concentrations reported near Building #7.

EPA agrees with PPG that the groundwater in the deep unit (representing groundwater below the former riverbed at approximately 25 feet bgs) has not been imposted by site related Leed contamination. Based on the five deep groundwater menitoring wells, the maximum Lead concentration is 1.6 ug/L in the deep groundwater.

Similar low-level Lead concentrations are observed in the shallow groundwater unit (representing groundwater at depths of less than 12 feet bgs) at monitoring wells MW-114, MW-115, and MW-124, which were installed in native material, with Lead concentrations less than 1 ug/L (which is the laboratory reporting limit). Overall, with the exception of MW-118 (which has been impacted by Building #10 operations, refer to Feasibility Study (FS) Report Section 3.5.5), the shallow groundwater on the northern side of the Site has not been substantially impacted by Lead_lead_contamination. Table 1 below reports the maximum concentration per shallow monitoring well (non-detected Lead concentrations are presented at the laboratory reporting limit of 1 ug/L) on the northern portion of the Site (excluding MW-118). It is acknowledged that the laboratory Exemption 5, Deliberative

Monitoring Well Number on the North Side of the Site	Maximum Lead Concentration (ug/L) Reported for Three Sampling Events over 11-month Period
E-4	7.4
E-5	1.4
E-6	3.3
E-7	2.0
E-8	1.0
MW-114	1.0
MW-115	1.0
MW-116	2.0
MW-117	17.7
MW-119	7.9
MW-120	25.3
MW-121	4.2
MW-122	7.0
MW-124	1.0

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Commented [KF2]: I don't know why "lead" is capitalized throughout the text but it is distracting and incorrect.

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In contrast, on the southern portion of the Site, a cluster of elevated Lead concentrations (in particular MW-107-MW-108, and MW-110), are observed in the vicinity of Building #7 where known lead contaminated soils have been reported.

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_ot all areas of the Site were impacted by past/current operations and lead-contaminated soils (at levels greater than 800 mg/kg) were not reported uniformly across the Site. However, based on the available soil and groundwater data, EPA is associating the <code>!Lead</code> contamination in the shallow groundwater to the site-related <code>!Lead</code> contaminated soils, which is a site-related contaminant.

Monitoring Well Number on the	Maximum Lead Concentration (ug/L)	
South Side of the	Reported for Three Sampling	
Site	Events over 11-month Period	
E-1	1.3	
E-2	3.7	
E-3	2.1	
MW-101	1.0	
MW-102	12.8	
MW-103	18.7	
MW-104	10.4	
MW-105	45.2 *	
MW-106	26.5 (near Building #7)	
MW-107	54.2 (near Building #7)	
MW-108	109 (near Building #7)	
MW-109	20.85 * (near Building #7)	
MW-110	39.9 (near Building #7)	
MW-111	14.6 (near Building #7)	
MW-112	8.2	
MW-123	1.2	
* Average of field s	* Average of field sample and duplicate	

Regarding PPG's letter dated June 30, EPA would like to respond to the salient points discussed in Section A:

- EPA does not agree with the site-wide averages and upper confidence level calculations
 presented in the PPG letter because grouping data irrespective of the conceptual site model and
 site activities is not appropriate.
- EPA acknowledges the statements in the original Work Plan/QAPP. However, the Work
 Plan/QAPP (like all planning documents) has evolved during the course of the project as now
 information comes to light. The Work Plan/QAPP now includes four QAPP Addendums, two
 QAPP Modifications, and a Work Plan Modification. EPA would also like to note that the
 referenced sentence was taken out of context, since the beginning of the paragraph states "past
 groundwater quality data suggest"—based on the current RI data, the conceptual site model for
 the Site has evolved.
- EPA agrees with PPG that there may be soil and groundwater contamination is associated with historical fill material Exemption 5, Deliberative
 However, the RI data have identified a

site-related source of Lead in the soils surrounding Building #7, and (at a minimum) the shallow groundwater in the vicinity of this source material has been impacted

EPA agrees with PPG that the groundwater in the deep unit (representing groundwater below the former riverbed at approximately 25 feet bgs) has not been not currently impacted by site-related Lead contamination. Based on the five deep groundwater monitoring wells the maximum Lead concentration is 1.6 ug/L in the deep groundwater.

the groundwater remedial alternatives must be feasible options Because EPA has identified to address Lead as a site-related contaminant, the groundwater remedial alternatives must be feasible options, and they must be designed to be protective of human health and the environment and in compliance with applicable or relevant and appropriate requirements (ARARs). Groundwater 5 "Institutional Controls, River Edge Barrier Wall, and Focused In-Situ Remediation" was evaluated in FS Section 5.3.5, but was screened out as a viable option for the following reasons:

 As stated by PPG in their text edits, Lead contamination would only be address via institutional controls and a vertical barrier wall. Institutional controls cannot be used to comply with ARARS.

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 Lastly, Groundwater Alternative #5 focuses exclusively on the volatile organic compounds (VOC), failing to achieve the RAO of restoring groundwater quality for semi-volatile organic compounds (SVOCs) and Lead.

For these reasons, Groundwater Alternative #5 was screened out of the Feasibility Study.





